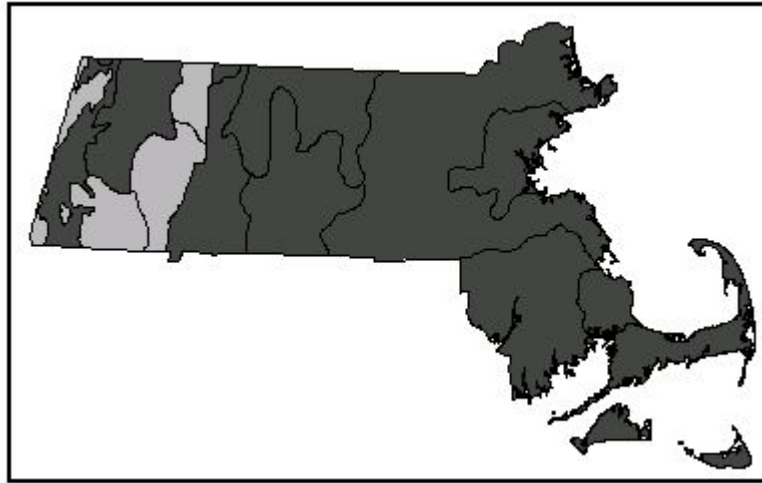


Community Name:
Community ELCODE:
SRANK:

WOODLAND VERNAL POOL
CP30000000
S3



- Concept:** Small, shallow depressions within upland forest that are temporarily flooded and provide important breeding habitat for amphibians.
- Environmental setting:** Woodland vernal pools are small, shallow depressions that are isolated from other surface waters. They flood in the spring and sometimes in the fall, but they are typically dry in the summer. They often have hydric soils. When dry, woodland vernal pools can often be recognized by a layer of stained leaves covering the dry depression.
- Vegetation Description:** Woodland vernal pools often have little or no vegetation, but they are ringed by upland trees or shrubs, such as sweet pepperbush (*Clethra alnifolia*). Other forested and non-forested wetland community types can function as vernal pool habitat if they have long periods of standing water, i.e. 2-3 months. See habitat values description under other community descriptions.
- Associations:** No associations have been described in Massachusetts.
- Habitat values for Associated Fauna:** Vernal pools are tracked as a separate community type because of the important habitat they provide for amphibians and invertebrates. Since vernal pools are temporary bodies of water, they do not support fish populations. Wood frogs (*Rana sylvatica*), Eastern spadefoot toads (*Scaphiopus holbrookii*), and four local species of mole salamanders (*Ambystoma* spp.) have evolved breeding strategies intolerant of fish predation on their eggs and larvae; the lack of fish populations is essential to the breeding success of these species. Other amphibian species use vernal pools but they do not depend on them; those species include American Toads (*Bufo americanus*), Green Frogs (*Rana clamitans*), and Red-spotted Newts (*Notophthalmus viridescens*). Vernal pools also support a diverse invertebrate fauna, including fairy shrimp (*Eubranchipus* spp.) which complete their entire life cycle in vernal pools.

Associated rare plants:

NONE KNOWN

Associated rare animals:

| | | |
|--------------------------|-------------------------|----|
| AMBYSTOMA JEFFERSONIANUM | JEFFERSON SALAMANDER | SC |
| AMBYSTOMA LATERALE | BLUE-SPOTTED SALAMANDER | SC |
| AMBYSTOMA OPACUM | MARbled SALAMANDER | T |
| CLEMMYS GUTTATA | SPOTTED TURTLE | SC |
| CLEMMYS INSCULPTA | WOOD TURTLE | SC |
| EMYDOIDEA BLANDINGII | BLANDING'S TURTLE | T |
| EUBRANCHIPUS INTRICATUS | INTRICATE FAIRY SHRIMP | SC |

From: Swain, P.C. & J.B. Kearsley. 2001. Classification of the Natural Communities of Massachusetts. Version 1.3. Natural Heritage & Endangered Species Program, Division of Fisheries & Wildlife. Westborough, MA.

Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries & Wildlife

| | | |
|-----------------------|-----------------------|----|
| EULIMNADIA AGASSIZII | AGASSIZ'S CLAM SHRIMP | E |
| HEMIDACTYLUM SCUTATUM | FOUR-TOED SALAMANDER | SC |
| LIMNADIA LENTICULARIS | AMERICAN CLAM SHRIMP | SC |

Examples with Public Access: Boxford State Forest and Wildlife Management Area have abundant vernal pools.

Threats: Woodland vernal pools are often overlooked during the dry season, so they end up being destroyed by filling or grading. They are often too small to meet minimum size requirements for state wetland protections. Hydrologic alterations also threaten vernal pool communities.

Management needs: Inventory is needed to identify where woodland vernal pools are. Protection of surrounding uplands is important for vernal pool species.

Synonyms

USNVC/TNC: Not described.

MA [old name]: Vernal pool.

ME: Vernal pool community.

VT: Vernal woodland pool.

NH: Vernal woodland pool.

NY: Vernal pool.

CT: Not described.

RI: Not described.

Golet & Larson, 1974:

Other:

Author: J. Kearsley **Date:** 7/21/99